

Claims

1. An apparatus for cosmetic treatment comprising:
an applicator including at least one positive and one negative electrode for
engaging the skin of a patient and applying a pulsed electric field to the
skin and the subcutaneous tissues in a predetermined volume of skin and
subcutaneous tissue to be treated;
a power supply for generating high voltage pulses for applying a pulsed electric
field to the skin and subcutaneous tissues, said pulses having a voltage
above the upper electroporation limit of subcutaneous fat cells in the
treated volume for the predetermined volume; and
a connector connecting said applicator to said power supply.

2. An apparatus according to claim 1 wherein said applicator includes a plurality
of electrodes in an array for applying electric field to the skin and subcutaneous tissues of
the patient.

3. An apparatus according to claim 1 wherein said applicator comprises a pair of
forceps including a pair of arms and an electrode mounted on each arm, said arms
moveable toward and away from one another.

4. An apparatus according to claim 1 wherein said applicator comprises a pair of
members, a first one of said members including a needle-like electrode and the second of
said members including a flat electrode.

5. An apparatus according to claim 1 wherein said power supply generates pulses
of duration in a range of 10 microseconds to 100 milliseconds.

6. An apparatus according to claim 6 wherein the amplitude of the electric field applied to the treated volume falls in a range of 20 Volt/mm to 2000 Volt/mm.

7. An apparatus according to claim 1 wherein the amplitude of the electric field applied to the treated volume falls in a range of 20 Volt/mm to 2000 Volt/mm.

8. An apparatus for weight loss and/or body sculpturing, comprising:
an applicator with an electromagnetic coil in it designed for generating high pulsed magnetic fields;
a pulse power supply capable of generating high pulses of current;
a low resistance cable connecting the electromagnetic coil to the power supply.

9. An apparatus according to claim 8 wherein the curl electric field generated in the subcutaneous tissue is in the range of 30 to 50 Volt/mm, and the duration of the pulses is 5 to 20 microseconds.

10. A method for cosmetic treatment in lieu of cosmetic surgery, weight loss and/or body sculpturing comprising:

providing an applicator with a set of positive and negative electrodes for engaging the skin of a patient and applying a pulsed electric field to the skin and the subcutaneous tissues of an area to be treated;

providing a power supply capable of generating high voltage pulses;

engaging patient's skin with the electrodes;

applying a pulsed electric field to the area to be treated via said electrodes with an amplitude sufficient to cause death to subcutaneous fat cells having a predetermined minimum size.

- 1 11. The method of claim 1 including:
- 2 applying electroporation treatment to predetermined multiple sites on the patient's
- 3 body.